

STUDIES IN THE EUPATORIEAE (ASTERACEAE). CLXVI.

A NEW GENUS SCHERYA AND ADDITIONS TO ACRITOPAPPUS.

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The tribe Eupatorieae is richly represented in eastern Brazil in and around the state of Bahia, and many endemic genera and species occur in the area. The inadequate plant collecting in the past had left many taxa still to be discovered and had hindered the recognition of proper concepts for taxa that were known. Continuing accumulation of material has brought a group of three species to our attention that have defective pappus and which would have fallen within the classical concept of Ageratum. Because the three species were from Bahia, because they all had paleae, and because all lacked the conical receptacle of Ageratum there was some inclination to relate them in an alternative genus concept. More detailed analysis shows that there are two comparatively unrelated elements involved, one related to Ageratum and the other to Acritopappus. The newspecimens and the resulting new data allow a correction of previous concepts of Acritopappus and confirm the more isolated phyletic position of the latter.

The original description of Acritopappus (King & Robinson, 1972) emphasized among the various characters the glabrous leaves. This character now proves to be erroneous. Not only do the additions to the genus have glands or even hairs on the leaves but the original species also are glanduliferous. The glands in the latter species seem ephemeral and the only obvious trace in mature leaves is the released viscous substance on the surface.

The present concept of Acritopappus is broadened, but additional differences can now be cited which indicate that Ageratum is not a close relative. Initially it should be asserted that the glands of the leaves of Acritopappus are raised from the surface and are not the sunken type characteristic of Ageratum. Plants of Acritopappus are decidedly shrubby while Ageratum contains mostly herbs and subshrubs. The leaves are pinnately veined and prominulous to prominent in a fine reticulum on at least the lower surface. The leaves of Ageratum are trinervate. Acritopappus has a broadly corymbose or subcymose inflorescence while Ageratum is strongly cymose. Involucral bracts of

Acritopappus are blunt with well-developed scarious margins while bracts in Ageratum are strongly pointed and narrowly if at all scarious. The receptacles in Acritopappus are flat but those of Ageratum conical. A final difference seems to be in chromosome number. Acritopappus has been counted three times (all by Coleman) twice in the type species A. longifolius, and once in the distinctive A. micropappus (reported as Ageratum in King et al, 1976). All these counts show $n = 9$. Ageratum has counts of $n = 10, 15$ and 20 . The reduced number in Acritopappus is apparently fixed in the group and is of interest as a separate independent reduction paralleling the $n = 9$ found in many Brickellia relatives.

Acritopappus shows consistency in a few other characters such as the paleaceous receptacles, the glabrous achenes, and the contorted carpodia with a sinuous trace. The pappus is absent or consists only of a few short points or setae.

The other undescribed element from Bahia is named here as the genus Scherya. The specimen was encountered among undetermined Calea specimens in a survey of Brazilian members of that genus. The Ageratum relationship seems to be fixed by the herbaceous habit and the strongly cymose inflorescence. The lack of a conical receptacle alone provides distinction from Ageratum, but a number of other characters are also available. The strap-shaped leaves of Scherya with subparallel non prominulous venation are apparently unique in the tribe. The glands are not sunken into the surface. The involucrel bracts are terminated by an expanded subglabrous appendage and there is a dense cluster of glands externally at the base of the appendage. The pappus is unusual in the degree of fusion at the base, being essentially tubular with five laciniate lobes of irregular lengths.

As a result of the study, the following new combination and new species of Acritopappus and the following new genus Scherya are necessary.

Acritopappus micropappus (Baker) R.M. King & H. Robinson, comb. nov. Ageratum micropappum Baker, Mart. Fl. Bras. 6(2):198. 1876. Brazil.

Acritopappus harleyi R.M. King & H. Robinson, sp. nov. Plantae frutescentes usque ad 4 m altae. Caules hexagonales vel subteretes glabri, internodis 1.5-6.0 cm longis. Folia opposita sessilia oblongo-ovata coriacea 5.5-8.5 cm longa et 2.8-4.0 cm lata base rotundatae margine multo serrulatae apice vix vel breviter acuminatae supra subglabrae subtus glanduliferae,

nervis dense pinnatis, nervis secundariis et nervulis utrinque prominulis. Inflorescentiae terminales subscap sae late corymbosae vel subcymosae, ramis primariis oppositis base patentibus, ramis ultimis 0-3 mm longis dense puberulis. Capitula anguste campanulata ca. 6 mm alta et 2 mm lata in glomerulis latioribus dense congesta; squamae involucri ca. 10 subaequales oblongae ca. 4 mm longae et 1 mm latae margine scariosae apice truncatae vel retusae minute denticulatae extus sparse puberulae vel glabrae; receptacula pauce paleacea, paleis bracteiformibus. Flores ca. 6 in capitulo; corollae sordide roseae ca. 3.5 mm longae tubulares superne vix latiores extus sparse glanduliferae, lobis triangularibus ca. 0.6 mm longis et 0.5 mm latis extus et intus sublaevibus; filamenta in parte superiore ca. 0.25 mm longa, cellulis dense annulate ornatis; thecae ca. 1.4 mm longae; appendices antherarum subquadratae ca. 0.2 mm longae et latae; appendices stylorum dense papillo-sae; achaenia 2.5-3.0 mm longa prismatica glabra; carpodia brevia distincte contorta; pappus nullus. Grana pollinis ca. 20 μ in diametro.

Type: BRAZIL: BAHIA: ca. 6 km N of Barra da Estiva on Ibiçara road. Grassland with low shrubs and scattered woodland. Alt. ca. 1,100 m Approx. 41° 18'W 13° 35'S. Erect shrub to 4 m with ascending brittle stems. Leaves coriaceous, flowers dull pink. Jan. 28, 1974. R. M. Harley 15554 (Holotype US, Isotype K).

Scherya bahiensis R.M.King & H.Robinson, gen. et sp. nov. Plantae herbaceae perennes ca. 0.5 m altae pauce vel non ramosae. Caules teretes vel subhexagonales dense albo-hirtelli et sessiliter glanduliferi, internodis ca. 1 cm longis. Folia opposita sessilia linearia 6.0-7.5 cm longa et 0.6-0.8 cm lata trinervata margine integra apice obtuse acuta supra et subtus dense et subtiliter albo-hirtella et sessiliter glandulifera, nervis parallelis vel subparallelis non prominulis. Inflorescentiae terminales subscaposae cymosae vel subcymosae, ramis erectis plerumque alternatis, ramis ultimis ca. 2-5 mm longis dense hirtellis et glanduliferis. Capitula 5-6 mm alta et 4-5 mm lata anguste campanulata; squamae involucri ca. 20 subaequales plerumque ca. 5 mm longae et 1 mm latae apice in appendice truncato chartaceo subglabro expansae subapicaliter extus perdense glanduliferae extus inferne 2-4-costatae hirtellae et glanduliferae, receptacula plana vel leniter convexa paleacea, paleis linearibus apice in appendice chartaceo glabro expansae. Flores ca. 25 in capitulo; corollae pallidae tubulosae sensim

superne anguste infundibulares ca. 3 mm longae extus glanduliferae, lobis 5 breviter triangularibus ca. 0.6 mm longis et 0.5 mm latis extus sublævibus glanduliferis intus dense papillois; filamenta glabra; filamenta in parte superiore 0.15-0.20 mm longa; cellulis plerumque breviter oblongis vel oblongis; parietibus valde annulate ornatis; thecae ca. 1 mm longae, cellulis endothecialibus subquadratis; appendices antherarum oblongae ca. 0.25 mm longae et 0.22 mm latae subtruncatae; basis stylorum glabris non nodulosi; appendices stylorum filiformes dense papillosae; achenia prismatica 5-costata ca. 1.8 mm longa glabra; carpodia breviter cylindrica in costis achaeniorum procurrentia, cellulis plerumque 30-50 μ longis et ca. 20 μ latis; pappus in corona laciniata valde 5-dentata connatus usque ad 1-2 mm longis, dentibus in apice anguste acuminatis. Grana pollinis ca. 22 μ in diametro.

Species typica: Scherya bahiensis R.M.King & H.Robinson

Type: BRAZIL: Bahia: Cachoeira. without precise locality. May 29, 1944. R. W. Schery 607b (Holotype US).

Something of the habitat is indicated by the innumerable sand grains adherent to the hairs of the plant.

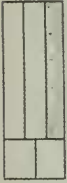
The genus is named after the collector.

Reference

King, R. M. , D. W. Kyhos, A. M. Powell, P. H. Raven & H. Robinson. 1976. Chromosome numbers in Compositae, XIII. Eupatorieae. Ann. Missouri Bot. Gard. 63: 862-888.

Acknowledgement

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United States National Herbarium
Acritopappus harleyi R.M.K. & H.R.
 Holotype
 det. R. M. King and H. Robinson 1977



UNITED STATES NATIONAL HERBARIUM
 BRAZIL - ENCAIÇADA - MATIAS
 SERRO - 1954

Ageratum sp

Det. Jeffrey 1975

WILLIAM S. A. RANSFORD, M. S. & A. B. G. & A.
 R. PHILLIPS
 18854

UNITED STATES
 2776950
 NATIONAL HERBARIUM

Acritopappus harleyi R.M.King & H.Robinson,
 Holotype, United States National Herbarium. Photo by
 Victor E. Krantz, Staff Photographer, National Museum
 of Natural History.



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PLANTS OF BRASIL

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1884

Scherya bahiensis R.M.King & H.Robinson, Holotype,
United States National Herbarium.



Enlargements of heads. Top, Acritopappus harleyi.
Bottom, Scherya bahiensis.